

The opinion in support of the decision being entered today  
was **not** written for publication and is **not**  
binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

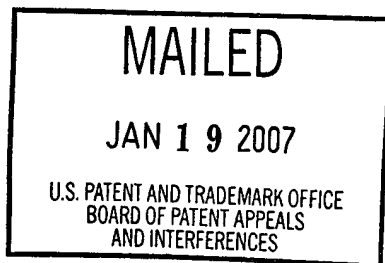
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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte** LARRY B. GRAY, ANN ECKERT, TODD M. CHELAK and  
ROBERT M. TURMARKIN

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Appeal No. 2007-0077  
Application No. 09/665,668  
Technology Center 3700

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ON BRIEF

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Before BAHR, NAPPI and HORNER, **Administrative Patent Judges.**

NAPPI, **Administrative Patent Judge.**

**DECISION ON APPEAL**

This is a decision on appeal under 35 U.S.C. § 134 of the final  
rejection of claims 21 and 22. For the reasons stated *infra* we sustain the  
Examiner's rejections of claims 21 and 22.

### **THE INVENTION**

The invention relates to a stent having axial flexibility. The stent has a plurality of longitudinally arranged bands which are maintained in a tubular structure by a plurality of links. See page 2 of Appellants' specification. Claim 21 is representative of the invention and is reproduced below:

21. A stent having first and second ends with an intermediate section therebetween, the stent further having a longitudinal axis, and both an unexpanded and expanded configuration comprising:

(a) a plurality of longitudinally disposed struts, wherein each strut defines a wave along the longitudinal axis; the spatial frequency of the wave associated with each of the struts being different in a first end region lying proximate to one of said ends in comparison to the spatial frequency of the wave in the intermediate section; and

(b) a plurality of links for maintaining the struts in a tubular structure; wherein said frequency is greater in said first end region.

### **THE REFERENCE**

The reference relied upon by the Examiner is:

Simon	5,354,308	Oct. 11, 1994
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### **THE REJECTIONS AT ISSUE**

Claims 21 and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Simon. Claim 22 stands rejected under the judicially created doctrine of obviousness-type double patenting. Throughout the opinion we make reference to the Briefs and the Answer for the respective details thereof.

## OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner and the evidence of anticipation relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answer.

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of Appellants and the Examiner, for the reasons stated *infra* we sustain the Examiner's rejections of claims 21 and 22.

Initially we note that Appellants have not argued the Examiner's factual or legal determinations supporting the obviousness double patenting rejection are in error. Rather, Appellants' arguments on pages 5 and 6 of the Brief and page 3 of the Reply Brief are directed to the issue as to whether the Terminal Disclaimer submitted to overcome the rejection is signed by the proper parties. This relates to a petitionable issue and not an appealable issue. *See In re Schneider*, 481 F.2d 1350, 1356-57, 179 USPQ 46, 51 (CCPA 1973) and *In re Mindick*, 371 F.2d 892, 894, 152 USPQ 566, 568 (CCPA 1967). *See also* Manual of Patent Examining Procedure (MPEP) (8th Ed., August 2001) § 1002.02(c), item 3(g) and § 1201. Thus, the relief sought by the Appellants would have been properly presented by a petition to the Director under 37 CFR § 1.181 instead of by appeal to this Board. Accordingly, we will not further consider whether the terminal

disclaimer is proper, and as the Appellants' have not alleged error in the rejection, we sustain the examiner's rejection.

Further, we note that on page 6 of the Brief, and pages 1 and 2 of the Reply Brief, Appellants present arguments directed to a rejection of claim 22 under 35 U.S.C. § 112 second paragraph and whether an amendment submitted after final should be entered. However, neither the Answer nor the Final Rejection recites a rejection of claim 22 under 35 U.S.C. § 112. Rather, the Final Rejection identifies that claim 22 is objected to as containing informalities. Further, the Examiner identifies on pages 2 of the Answer and the Advisory Action, dated October 24, 2003, that the October 8, 2003 amendment to claim 22 is not entered. These issues relate to petitionable subject matter and the relief sought by the Appellants would have been properly presented by a petition to the Director under 37 CFR §§ 1.127 and 1.181 instead of by appeal to this Board. According, we will not further consider these issues.

Rejection of claim 21 under 35 U.S.C. § 102.

On page 4 of the Brief, Appellants assert that Simon's strut is made up of "a series of *straight* segments" (emphasis original). Appellants argue "as can be clearly seen from Figure 2 of the current invention, the struts of the present invention are actually *cut* in wave-shaped form." Further, Appellants argue:

Of course, each of the waves in the present application are described as having a greater frequency at their end regions. Naturally since Simon does not disclose a wave, he cannot *possibly* disclose a "frequency" of such "waves."

On page 2 of the Reply Brief, Appellants argue that Simon does not teach a wave-shaped strut in the unexpanded configuration. Appellants assert that Figure 4 of Simon shows when the stent is in the unexpanded configuration the struts lie parallel to each other. Further, on page 2 of the Reply Brief, Appellants argue that Simon does not teach wave-shaped struts in the expanded configuration as a “trapezoidal wave” is only useful in the electrical arts as exemplified by examiner’s reliance on the disclosure of Nomura, which discusses a welding machine.

The examiner’s rejection of claim 21 is on page 4 of the Answer, and relies on figure 4 of Simon to disclose a stent which is made up of longitudinal struts which define waves. The stent has first and second ends and an intermediate section. The frequency of the waves associated with the strut is different in the region of the two ends than in the region of the intermediate section. Further, on page 6 of the Answer, the examiner finds that the waves of Simon are trapezoidal, and that the claim term “wave” can include trapezoidal waves. The examiner relies upon extrinsic evidence of Nomura (U.S. Patent 5,844,193) to support a finding that waves may be trapezoidal in shape.

We concur with the examiner’s claim interpretation and finding that Simon anticipates claim 21. However, we do so without relying upon the extrinsic evidence of Nomura. In analyzing the scope of the claim, Office personnel must rely on Appellants’ disclosure to properly determine the meaning of the terms used in the claims. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980, 34 USPQ2d 1321, 1330 (Fed. Cir. 1995). “[I]nterpreting what is *meant* by a word *in* a claim ‘is not to be

confused with adding an extraneous limitation appearing in the specification, which is improper.’” (Emphasis original) *In re Cruciferous Sprout Litigation*, 301 F.3d 1343, 1348, 64 USPQ2d 1202, 1205, (Fed. Cir. 2002) (citing *Intervet America Inc v. Kee-Vet Laboratories Inc.*, 12 USPQ2d 1474, 1476 (Fed. Cir. 1989)). Initially, we note that Appellants’ specification does not define the term “wave.” Rather, page 6 of Appellants’ specification identifies that each longitudinal band “undulates through approximately two cycles” and that “the wave associated with each of the bands may have approximately the same fundamental spatial frequency.” Further, in viewing Appellants’ figure 2, it appears that bands or struts include straight sections between each peak and trough. Thus, we find that Appellants’ specification identifies that wave shaped structures are structures that contain undulations. We do not find a definition which limits the term “wave” to a shape which does not contain straight sections. Thus, we concur with the examiner’s determination that the claim term “wave” includes trapezoidal shaped waves. However we note that the examiner’s reliance on Nomura to define the term “wave” is misplaced, as it relies upon extrinsic evidence. Our reviewing court has stated that they view “extrinsic evidence in general as less reliable than the patent and its prosecution history in determining how to read claim terms, for several reasons. For instance, extrinsic evidence by definition is not part of the patent and does not have the specification’s virtue of being created at the time of patent prosecution for the purpose of explaining the patent’s scope and meaning” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1318, 75 USPQ2d 1321, 1330 (Fed. Cir. 2005).

We find that Simon teaches a stent made of a wire which is bent to form longitudinal struts. Each longitudinal strut undulates between two levels to form a wave. The wave consists of four segments two parallel to the longitudinal axis and two segments which transition between the segments parallel to the longitudinal axis. We consider this disclosure of Simon to meet Appellants' claimed struts which define a wave along the longitudinal axis. Simon teaches that the straight segments of the wave that lie parallel to the longitudinal axis are welded to the straight segment of the adjacent wave, i.e. the lower straight segment of one wave is welded to the upper straight segment of the lower adjacent wave. See straight portion 6 of strut in figure 4, and column 3, lines 16 through 18. We consider this disclosure of Simon to meet Appellants' claimed links. Further, in figure 4 Simon teaches that the wave has a greater frequency in the ends, sections with cells 18 and 14, than the intermediate section, section with cells 20. Simon states that the stent of figures 1 and 2 is depicted in the expanded configuration. Figure 4 is described as an alternative embodiment, in the absence of any indication to the contrary, we find that figure 4 is also the expanded configuration. See column 3, lines 9, 10, and 54 through 60. Simon depicts the unexpanded stent in figures 5, 9c and 9d. In all of these depictions, the struts of the stent undulate and form a wave.

Regarding Appellants' argument that the struts of the invention are being "cut" in a wave-shaped form, we find no limitation in claim 21 directed to the struts being cut in the wave-shaped form. Rather, claim 21 recites the struts define a wave. Further, regarding Appellants' argument that Simon teaches away from the claimed invention, we disagree as we find

that Simon anticipates the claimed invention. Thus, Appellants' arguments have not convinced us of error in the examiner's rejection of claim 21. For the forgoing reasons we sustain the examiner's rejection of claim 21.

Rejection of claim 22 under 35 U.S.C. § 102.

On page 5 of the Brief, Appellants argue that claim 22 additionally requires "that the links which separate the plurality of circumferentially disposed struts, are axially displaced from each other" and that Simon does not teaches such a structure. Appellants argue that Simon teaches that the wave-shaped struts intersect each other.

Appellants' arguments have not persuaded us of error in the examiner's rejection. Claim 22 recites "a plurality of circumferential links for maintaining the struts in a tubular structure at a plurality of locations along said strut, wherein said strut is connected to an adjacent strut by a separate link, each link being axially displaced from any circumferentially adjacent link." We note, as identified by the examiner, claim 22 contains some informalities. Nonetheless, it is clear that claim 22 recites a plurality of links which maintain the struts in a tubular structure, that the links connect adjacent struts, and that the links are axially displaced. We find no limitation which differentiates a link from a connection at the intersection of two struts. Further, viewing Appellants' figure 2, it appears that links, such as link 7 are intersections of two adjacent struts.

As discussed *supra* we find that Simon teaches a stent with a plurality of wave-shaped struts. The adjacent struts are welded together at sections along the wave, e.g. section 6 of figure 4, to secure the struts together in a



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tubular configuration. See column 3, lines 15 through 25. We consider these welded sections to meet Appellants' claimed link. Further, as shown in figures 1 through 4, the welds connecting a strut to the adjacent strut and above are offset axially from the welds connecting a strut to the strut adjacent and below. Thus, Appellants' arguments have not convinced us of error in the Examiner's rejection of claim 22. For the forgoing reasons we sustain the Examiner's rejection of claim 22.

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In summary, we sustain the Examiner's rejection of claims 21 and 22 under 35 U.S.C. § 102(b) and the Examiner's rejection of claim 22 under the judicially created doctrine of obviousness-type double patenting. The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

**AFFIRMED**

  
JENNIFER D. BAHR  
Administrative Patent Judge

  
ROBERT E. NAPPI  
Administrative Patent Judge

  
LINDA E. HORNER  
Administrative Patent Judge

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